The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Previously Presented) A colorimetric sensor for detecting a particular material in the air, comprising:

a receptor molecule specifically binding with the particular material in the air~~,~~; and

a polymer molecule having an altered light absorbency due to binding of the particular material and the receptor molecule.

2. (Previously Presented) The colorimetric sensor according to claim 1, wherein

the receptor molecule is linked to the polymer molecule at a portion of the receptor molecule not participating in binding with the particular material.

3. (Previously Presented) The colorimetric sensor according to claim 1, wherein

the altered light absorbency of the polymer molecule is caused by a molecular structural alteration in the polymer molecule.

4. (Previously Presented) The colorimetric sensor according to claim 3, wherein

the polymer molecule ncludes polydiacetylene.

5. (Previously Presented – Withdrawn) The colorimetric sensor according to claim 1, wherein

the altered light absorbency of the polymer molecule is caused by an alteration in an electron distribution state in the polymer molecule.

6. (Previously Presented – Withdrawn) The colorimetric sensor according to claim 5, further comprising

a complex consisting of an electron-withdrawing material and a ligand specific for the receptor molecule, the complex ~~is~~ being linked to the receptor molecule via the ligand.

7. (Previously Presented – Withdrawn) The colorimetric sensor according to claim 5, wherein

the polymer molecule is selected from a group consisting of polythiophene, oligothiophene, polypyrrole and polyvinylcarbazole.

8. (Previously Presented – Withdrawn) The colorimetric sensor according to claim 7, wherein

the polymer molecule is polyvinylcarbazole.

9. (Previously Presented – Withdrawn) The colorimetric sensor according to claim 6, wherein

the ligand is selected from a group consisting of viruses, antigens and biotin.

10. (Previously Presented – Withdrawn) The colorimetric sensor according to claim 6, wherein

the electron-withdrawing material is selected from a group consisting of anthraquinone, tetracyanoquinodimethane, trinitrofluorenone and dinitrofluorenone.

11. (Previously Presented) The colorimetric sensor according to claim 1, wherein

the receptor molecule is selected from a group consisting of sialic acid, ganglioside, antibodies, antibody fragments and avidin.

12. (Previously Presented) The colorimetric sensor according to claim 1, further comprising

a water-retaining means.

13. (Previously Presented – Withdrawn) The colorimetric sensor according to claim 12, wherein

the water-retaining means includes a porous material.

14. (Previously Presented – Withdrawn) The colorimetric sensor according to claim 13, wherein

the porous material is selected from a group consisting of zeolite and porous sintered products.

15. (Previously Presented) The colorimetric sensor according to claim 12, wherein

the water-retaining means includes an absorbent polymer.

16. (Previously Presented) The colorimetric sensor according to claim 15, wherein

the absorbent polymer is selected from a group consisting of alginic acid, dextran, collagen, cellulose derivatives, starch derivatives, polyvinyl alcohol and sodium polyacrylate.

17. (Previously Presented) The colorimetric sensor according to claim 16, wherein

the cellulose derivative is selected from a group consisting of carboxymethylcellulose, methylcellulose and ethylcellulose.

18. (Previously Presented) The colorimetric sensor according to claim 1, wherein

the polymer molecule is modified so as to have a water-absorbing ability.

19. (Previously Presented – Withdrawn) A filter for an air conditioner including the colorimetric sensor as defined in claim 1.

20. (Previously Presented – Withdrawn) An apparatus for confirming a lifetime of a filter for an air conditioner, comprising:

a solution containing the colorimetric sensor as defined in claim 1;

a solution bath for retaining the solution; and

a means for bubbling the air before and/or after passing through the filter in the solution.

21. (Previously Presented – Withdrawn) An air conditioner including the filter as defined in claim 19.

22. (Previously Presented – Withdrawn) An air conditioner including the apparatus as defined in claim 20.

23. (Previously Presented – Withdrawn) The air conditioner according to claim 21, wherein

the colorimetric sensor is placed at an upstream and/or a downstream side of the filter so as to contact air which has not been heat-exchanged.

24. (Previously Presented – Withdrawn) The air conditioner according to claim 21, wherein

the colorimetric sensor is controlled so as to be maintained at a suitable temperature for binding with the particular material without depending upon a working state of the air conditioner.

25. (Previously Presented – Withdrawn) The air conditioner according to claim 21, further comprising

an optical sensor for detecting a color change of the colorimetric sensor.

26. (Previously Presented – Withdrawn) A method for confirming a lifetime of a filter for an air conditioner, comprising using the colorimetric sensor as defined in claim 1.